

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

I. LISTING OF CLAIMS:

1-32. (cancelled)

33. (currently amended) An expression vector,

~~which comprises~~comprising: (a) a first coding region encoding ~~PPIase~~a peptidyl-
prolyl cis-trans isomerase (PPIase) having molecular chaperone activity, and

(b) a region having at least one restriction enzyme site in which a second coding region encoding a desired protein can be inserted.

34. (previously presented): The expression vector according to claim 33,

wherein the first coding region is operatively linked to a promoter, and the restriction enzyme site is in the same reading frame as the first coding region, and is downstream of the first coding region.

35. (currently amended): The expression vector according to claim 33 ,

which has a region ~~being between~~ at the first coding region and at the region having at least one restriction enzyme site in which a second coding region can be inserted, ~~and is translated in the same reading frame to be a protease digestion site~~encoding a protease digestion site in the same reading frame as the first and second coding regions.

36. (previously presented): An expression vector,

wherein a second coding region encoding a desired protein is inserted into the expression vector according to claim 33.

37. (previously presented): The expression vector according to claim 33 ,

- wherein the PPIase having molecular chaperone activity is FKBP-type PPIase.
38. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity is cyclophilin-type PPIase.
39. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity is parvulin-type PPIase.
40. (previously presented): The expression vector according to claim 37,
wherein the FKBP-type PPIase is archaeobacterial FKBP-type PPIase.
41. (previously presented) The expression vector according to claim 40,
wherein the archaeobacterial FKBP-type PPIase is short type FKBP-type PPIase.
42. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises an IF domain
and/or a C-terminal domain of archaeobacterial FKBP-type PPIase.
43. (previously presented): The expression vector according to claim 37,
wherein the FKBP-type PPIase is trigger factor-type PPIase.
44. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises a N-terminal
domain and/or a C-terminal domain of trigger factor-type PPIase.
45. (previously presented): The expression vector according to claim 37,
wherein the FKBP-type PPIase is FkpA-type PPIase.
46. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises a N-terminal
domain of FkpA-type PPIase.

47. (previously presented): The expression vector according to claim 37,
wherein the FKBP-type PPIase is FKBP52-type PPIase.
48. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises a C-terminal
domain of FKBP52-type PPIase.
49. (previously presented): The expression vector according to claim 38,
wherein the cyclophilin-type PPIase is CyP40-type PPIase.
50. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises a C-terminal
domain of CyP40-type PPIase.
51. (previously presented): The expression vector according to claim 39,
wherein the parvulin-type PPIase is SurA-type PPIase.
52. (previously presented): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises a N-terminal
domain of SurA-type PPIase.
53. (previously presented): The expression vector according to claim 36,
wherein the second coding region has a nucleotide sequence encoding a
monoclonal antibody.
54. (previously presented): The expression vector according to claim 36,
wherein the second coding region has a nucleotide sequence encoding a
membrane protein.
55. (previously presented): A host,
which contains the expression vector according to claim 33.

56. (previously presented): The host according to claim 55,
which is Escherichia coli.
57. (previously presented) A fused protein,
which comprises PPIase having molecular chaperone activity and a desired
protein.
58. (previously presented): The fused protein according to claim 57,
which comprises a protease digestion site between PPIase having molecular
chaperone activity and a desired protein.
59. (currently amended): A process for producing a fused protein comprising PPIase
having molecular chaperone activity and a desired protein,
~~which comprises making the expression vector according to claim 36, comprising~~
culturing a host cell transformed with the expression vector of claim 33 to express the
fused protein.
60. (currently amended): The process for producing a fused protein according to
claim 59,
which comprises culturing ~~the~~ host containing the expression vector under
condition of expression of the expression vector, and ~~making express~~ expressing the
fused protein in a cytoplasm.
61. (currently amended): The process for producing a fused protein according to
claim 59,
which comprises providing a region being transcribed and translated to be a signal
sequence at a 5' terminus of ~~a~~ the first coding region or a 5'-3' terminus of ~~a~~ the second
coding region of the expression vector, and culturing a host containing the expression

vector under condition of expression of the expression vector to express the fused protein in athe periplasm or a medium.

62. (currently amended): The process for producing a fused protein according to claim 59,

which comprises ~~making the expression vector~~ culturing a host cell transformed with the expression vector to express the fused protein in a cell-free translation system.

63. (currently amended): The process for producing a fused protein according to claim 59,

wherein the fused protein is adsorbed on a carrier harboring macrolide, cyclosporin, juglone, or ~~its analogous a~~ compound inhibiting which inhibits PPIase activity, ~~and then the wherein said~~ carrier is recovered and the fused protein is recovered from the carrier.

64. (currently amended): A process for producing a desired protein,

which comprises digesting the fused protein comprising athe protease digestion site obtained by the process according to claim 59, with a protease digesting a protease digestion site.